

## **Attachment 3**

### **Hypothetical Sample CalPERS Actuarial Valuation Reports**

As of

June 30, 1995 (ARC for fiscal 1997/98)

And

June 30, 1996 (Required Supplementary Information - Three Year Funded  
Status)



**PUBLIC AGENCIES  
ACTUARIAL VALUATION  
AS OF JUNE 30, 1995**

**Required Contributions for  
The Fiscal Year  
July 1, 1997 - June 30, 1998**



**CalPERS**  
**Actuarial & Employer Services Division**  
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December 20, 1996

**SAFETY POLICE PLAN FOR ANYWHERE CITY, Employer Number XXX**

Dear Employer,

Enclosed please find a copy of the June 30, 1995, actuarial valuation of your pension plan (a separate report is included for each plan). This valuation report contains important actuarial information about your pension plan at CalPERS. CalPERS staff actuaries will be visiting several centralized locations around the State in the next several months to discuss the actuarial report with you. A forthcoming circular letter will announce times and places. We urge you to attend one of these sessions and to bring the report with you to the session.

Included on page 2 of the report is the funded status of your plan as of June 30, 1995. The liability shown is the Entry Age Normal Accrued Liability, based on the method used to fund your plan. The calculation of this liability is based on the participants in your plan on June 30, 1995, the assets of your plan on June 30, 1995, the actuarial assumptions adopted by the CalPERS Board for your plan, and the benefits for which you have contracted with CalPERS as of June 30, 1996. A three year historic trend of this funded status is provided on the same page for those agencies for whom the last three annual valuations have been performed.

In a letter dated September 27, 1996, you were provided an estimate of new surplus, which together with any remaining prior surplus, could be used to pay employer and/or employee contributions to CalPERS through June 30, 1997. The enclosed report establishes the finalized new surplus for fiscal 1996-97. Your actual "new" surplus for fiscal 1996-97, for the SAFETY POLICE PLAN FOR ANYWHERE CITY, is \$21,960.

Also included in the report is your new employer contribution rate for fiscal 1997-98. Your new rate for the SAFETY POLICE PLAN FOR ANYWHERE CITY is 10.127%. A reconciliation from your current 1996-97 rate to your new 1997-98 rate, broken down by reason for the change, is provided on page 7 of the report.

If you have questions, please call your team actuary.

Sincerely,



Ron Seeling, Chief Actuary  
Actuarial & Employer Services Division

### **Actuarial Certification**

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the SAFETY POLICE PLAN FOR ANYWHERE CITY, employer number XXX. This valuation is based on the employee data provided, the statement of assets provided by the CalPERS Fiscal Services Division, and the benefits provided under this contract with CalPERS. It is our opinion that the valuation has been performed by qualified actuaries in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan.

A handwritten signature in black ink, appearing to read "Ron Seeling". The signature is fluid and cursive, with a long horizontal stroke extending from the left.

Ron Seeling, Ph.D., F.C.A., A.S.A., M.A.A.A.  
Enrolled Actuary  
Chief Actuary, CalPERS

### Purpose of the Report

This actuarial valuation of the SAFETY POLICE PLAN FOR ANYWHERE CITY of the California Public Employees' Retirement System (CalPERS) was performed by CalPERS' staff actuaries as of June 30, 1995, in order to

- set forth the actuarial assets and funding liabilities of this plan as of June 30, 1995;
- establish the actuarially required contribution rates of this plan for the fiscal year July 1, 1997 through June 30, 1998; and
- provide actuarial information as of June 30, 1995, to the CalPERS Board of Administration and other interested parties.

Use of this report for other purposes, such as for disclosure under Governmental Accounting Standards Board Statement No. 5, is inappropriate.

### Employer Contribution Rate

The actuarially required contribution, both in projected dollars and as a rate of projected payroll, for the fiscal year July 1, 1997 through June 30, 1998, are shown below:

	Expected Dollar <u>Amount</u>	Percent of Projected <u>Payroll</u>
Payment for Normal Cost	\$ 323,860	12.937%
Payment on the Unfunded Liability	(70,355)	(2.810%)
Payment for 1959 Survivor Benefits*	<u>0</u>	<u>0.000%</u>
Total (not less than zero)	\$ 253,504	10.127%

\*This is for first and second level only. The third and fourth level contributions are billed separately.

### Funded Status of the Plan

The table below displays a short history of the Entry Age Normal Accrued Liability, the Actuarial Value of Assets, the Unfunded (or Overfunded) Entry Age Normal Accrued Liability, Funded Status (i.e., the ratio of the Actuarial Value of Assets to Entry Age Normal Accrued Liability), the estimated annual covered payroll and the Unfunded Actuarial Accrued Liability (UAAL) as a percentage of that covered payroll.

#### Funded Status of the Plan

Valuation <u>Date</u>	Entry Age Normal <u>Accrued Liability</u>	Actuarial Value <u>of Assets</u>	Unfunded/ (Overfunded) <u>Liability</u>	Funded <u>Status</u>	Annual Covered <u>Payroll</u>	UAAL As a % of <u>Payroll</u>
6/30/93	9,989,977	9,811,588	178,389	98.2%	2,365,227	7.5%
6/30/94	10,435,112	10,775,863	(340,751)	103.3%	2,241,435	(15.2%)
6/30/95	11,866,326	11,948,957	(82,631)	100.7%	2,292,410	(3.6%)

## Changes Since Prior Valuation

**Actuarial Assumptions** - The only changes in actuarial assumptions since the prior valuation apply to miscellaneous categories that have contracted for industrial disability benefits. Previously, the rates for such agencies included an approximation of .5% of annual payroll as the cost of this benefit. This has been changed to use two specific sets of probabilities of disability, one set for ordinary disability and one set for industrial disability. The effect of these changes on the rates is displayed on page 7 of this report. A description of the assumptions can be found in Appendix A.

**Methods** - The overall funding method, Entry Age Normal, remains unchanged since the prior valuation. However, according to state statute, the portion of surplus used as a direct offset of employer contributions has been lowered from 40% of such surplus as of the June 30, 1994, valuation to 20% of such surplus as of the June 30, 1995, valuation. This is the last time any excess assets will be transferred to surplus accounts. Commencing July 1, 1997, all surplus assets will be used to lower employer contributions through the regular amortization process. In order to accomplish this, this valuation projects the unfunded liability/(excess assets) to June 30, 1997, and amortizes the result over the plan's remaining amortization period.

**Asset Transfers** - By Board action in October, 1995, the administrative approach to PPPA was retroactively changed to a method that minimizes cross group subsidization. This required a reconstruction of PPPA for the four fiscal years 1991-92 through 1994-95. Retroactively replacing the previous administrative procedures with the new administrative procedures created asset transfers between all groups within the Public Employees' Retirement Fund as of June 30, 1995. The amount of such asset transfers and the effect of transfers on the rates are displayed on page 7 of this report.

**Benefits** - Liabilities in this report generally reflect plan changes effective on or before June 30, 1996 and so recognize all plan changes between July 1, 1995 and June 30, 1996. Please refer to Appendix B for a summary of plan provisions used in this valuation.

## Comparison of Current and Prior Year Results

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

	<u>June 30, 1994</u>	<u>June 30, 1995</u>
Members Included in the Valuation *		
Active Members	52	52
Transfers	11	12
Vested Terminations	7	6
Receiving Payments	<u>21</u>	<u>24</u>
Total	91	94
Annual Covered Payroll	\$ 2,241,435	\$ 2,292,410
Projected Annual Payroll	\$ 2,447,703	\$ 2,503,369
Average Annual Pay	\$ 43,104	\$ 44,085
Average Attained Age for Actives	36.48	36.46
Average PERS Entry Age for Actives	26.52	26.75
Present Value of Projected Benefits	\$ 14,717,048	\$ 16,285,563
Entry Age Normal Accrued Liability	\$ 10,435,112	\$ 11,866,326
Assets Values		
Cost Value	\$ 9,552,164	\$ 10,668,712
Actuarial Value	\$ 10,775,863	\$ 11,948,957
Market Value	\$ 10,742,366	\$ 12,702,197
Unfunded/(Overfunded) Liability	\$ (340,751)	\$ (82,631)
New "Surplus" at Valuation Date	\$ 201,389	\$ 21,960
Prior Years' "Surplus" at Valuation Date	<u>0</u>	<u>0</u>
Total "Surplus" at Valuation Date	\$ 201,389	\$ 21,960
Employer Contribution Required (in Projected Dollars)		
Payment for Normal Cost	\$ 315,241	\$ 323,860
Payment on the Unfunded Liability **	(70,587)	(70,355)
Payments for Ad Hoc Colas	0	0
Payment for 1959 Survivor Benefits***	<u>0</u>	<u>0</u>
Total (not less than zero)	\$ 244,655	\$ 253,504
Employer Contribution Required (Percent of Projected Payroll)		
Payment for Normal Cost	12.879%	12.937%
Payment on the Unfunded Liability **	(2.884%)	(2.810%)
Payments for Ad Hoc Colas	0.000%	0.000%
Payment for 1959 Survivor Benefits***	<u>0.000%</u>	<u>0.000%</u>
Total (not less than zero)	9.995%	10.127%

\* Counts of members included in the valuation are counts of records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in a double counting of liabilities. Counts do not include beneficiaries of 3rd or 4th level 1959 Survivor benefits.

\*\*The payment shown is the amortization of the unfunded liability due to prior service, if any, over the period ending in 2000 and unfunded liability due to current service, if any, over the period ending in 2000.

\*\*\* This is for first and second level only. The third and fourth level contributions are billed separately.

**Development of Accrued and Unfunded Liabilities**

1. Present Value of Benefits	
a) Actives, Transfers and Vested Terminated	\$ 10,381,840
b) Receiving Payments	<u>5,903,723</u>
c) Total	\$ 16,285,563
2. Present Value of Future Employer Normal Costs	\$ 3,139,867
3. Present Value of Future Employee Contributions	<u>1,279,370</u>
4. Entry Age Normal Accrued Liability [(1c) - (2) - (3)]	\$ 11,866,326
5. Actuarial Value of Assets*	
a) Employer Reserves	\$ 9,479,271
b) Active Employee Account Balances	<u>2,469,686</u>
c) Total Valuation Assets	<u><u>\$ 11,948,957</u></u>
6. Unfunded Accrued Liability [(4) - (5)]	\$ (82,631)

\* Does not include "surplus", if any, at valuation date.



### Gain/(Loss) Analysis 6/30/94 - 6/30/95

#### Amounts at the Beginning of the Year

1) Accrued Liability	\$ 10,435,112
2) Actuarial Value of Assets	<u>10,775,863</u>
3) Unfunded Liability [(1)-(2)]	(340,751)
4) Employer Normal Cost plus Employee Contributions	480,237

#### Amounts During the Year

5) Employer and Employee Contributions	\$ 490,555
6) Benefit Payments	431,534
7) Refunds	4,506

#### Expected Amounts at the End of the Year

8) Expected Accrued Liability [ $((1)+(4)) \times 1.085 - ((6)+(7)) \times 1.0425$ ]	\$ 11,388,582
9) Expected Actuarial Value of Assets [ $(2) \times 1.085 + ((5)-(6)-(7)) \times 1.0425$ ]	<u>11,748,643</u>
10) Expected Unfunded/(Overfunded) Liability [(8)-(9)]	\$ (360,061)

#### Actual Amounts at the End of the Year (before all other changes)\*

11) Actual Accrued Liability	\$ 11,856,861
12) Actual Actuarial Value of Assets**	<u>11,880,493</u>
13) Actual Unfunded/(Overfunded) Liability [(11)-(12)]	\$ (23,632)

#### Gain/(Loss) for the Year

14) Liability Gain/(Loss) [(8)-(11)]	\$ (468,279)
15) Asset Gain/(Loss) *** [(12)-(9)]	<u>131,850</u>
16) Total Gain/(Loss) [(14)+(15)]	\$ (336,429)

\* All gains and losses are determined on prior year's assumptions, plan provisions and methods.

\*\* This asset amount does not include "surplus", if any, at valuation date. Further, it is based on the prior year's rule of transferring 40% of excess assets, if any, to new surplus and is prior to PPPA reversion and all other changes. For these reasons, this asset amount does not agree with other asset amounts shown in this report.

\*\*\* Amounts transferred to "new surplus" as of June 30, 1995, are treated as "asset losses" in this analysis.

## Reconciliation of Employer Contribution Rates

1) Calculated Contribution Rate for 7/1/96 - 6/30/97 <sup>1</sup>	9.995%
2) Effect of changes since the prior valuation	
a) Effect of changes in demographics and financial results	2.711%
b) Effect of plan amendments between 6/30/95 and 6/30/96 <sup>2</sup>	0.000%
c) Effect of changes in actuarial assumptions	0.000%
d) Effect of PPPA reversion <sup>3</sup>	(0.374%)
e) Effect of the phasing-out of surplus (40% to 20%)	(0.201%)
f) Effect of projecting the unfunded and/or surplus to 6/30/97	<u>(2.005%)</u>
g) Net effect of the changes above	0.131%
[Sum of (a) through (f)]	
3) Contribution Rate for 7/1/97 - 6/30/98	10.127%
[(1)+(2g)]	

## Reconciliation of Estimated Employer Contributions

(Based on projected annual payroll)

1) Contribution Required for 7/1/96-6/30/97 <sup>1</sup>	\$	244,655
2) Effect of changes since the prior valuation		
a) Effect of change in payroll	\$	5,564
b) Effect of changes in demographics and financial results		67,866
c) Effect of plan amendments between 6/30/95 and 6/30/96 <sup>2</sup>		0
d) Effect of changes in actuarial assumptions		0
e) Effect of PPPA reversion <sup>3</sup>		(9,363)
f) Effect of the phasing-out of surplus as a direct offset		(5,032)
g) Effect of projecting the unfunded and/or surplus to 6/30/97		<u>(50,193)</u>
h) Net effect of the changes above	\$	8,843
[Sum of (a) through (g)]		
3) Estimated Contribution Required for 7/1/97 - 6/30/98	\$	253,504
[(1)+2(h)]		

<sup>1</sup> The rate actually paid may be different if a prepayment of unfunded actuarial liability or a funding extension is made.

<sup>2</sup> A change from 1st or 2nd level 1959 Survivor benefits to 3rd or 4th level may result in a decrease in rates because contributions for the 3rd and 4th level 1959 Survivor benefits are collected separately from employer rates.

<sup>3</sup> See the discussion on page 3 regarding the Board's retroactive action on PPPA. See page 10 for the dollar amount transferred from or to this plan's assets as a result of this Board action.

CALPERS ACTUARIAL VALUATION - JUNE 30, 1995  
SAFETY POLICE PLAN FOR ANYWHERE CITY  
EMPLOYER NUMBER XXX

Development of the Actuarial Value of Assets  
for the Public Employees' Retirement Fund  
(in Millions)

	As of 6/30/87	As of 6/30/88	As of 6/30/89	As of 6/30/90	As of 6/30/91	As of 6/30/92	As of 6/30/93	As of 6/30/94	As of 6/30/95
1. Market Value of Assets	\$ 44,027	\$ 45,470	\$ 52,320	\$ 58,020	\$ 61,278	\$ 67,489	\$ 76,116	\$ 76,646	\$ 89,241
2. Book Value of Assets	35,173	40,208	44,630	51,584	55,272	59,827	64,014	68,154	74,937
3. Cumulative Unrealized Gain/(Loss) as of the current June 30 [(1) - (2)]	\$ 8,854	\$ 5,262	\$ 7,690	\$ 6,436	\$ 6,006	\$ 7,662	\$ 12,102	\$ 8,492	\$ 14,304
4. Cumulative Unrealized Gain/(Loss) as of the prior 6/30	7,315	8,854	5,262	7,690	6,436	6,006	7,662	12,102	8,492
5. Unrealized Gain/(Loss) for the prior fiscal year [(3) - (4)]	\$ 1,539	\$ (3,592)	\$ 2,428	\$ (1,254)	\$ (430)	\$ 1,656	\$ 4,440	\$ (3,610)	\$ 5,812
6. Realized Gain/(Loss) for the prior fiscal year	995	1,391	1,420	2,561	713	1,923	1,550	1,389	2,942
7. Total Gain/(Loss) for the prior fiscal year [(5) + (6)]	\$ 2,534	\$ (2,201)	\$ 3,848	\$ 1,307	\$ 283	\$ 3,579	\$ 5,990	\$ (2,221)	\$ 8,754
8. Market Value as of the prior 6/30	\$ 37,742	\$ 44,027	\$ 45,470	\$ 52,320	\$ 58,020	\$ 61,278	\$ 67,489	\$ 76,116	\$ 76,646
9. Total Gain/(Loss) for the prior year as a percent of the Market Value [(7)/(8)]	6.71%	-5.00%	8.46%	2.50%	0.49%	5.84%	8.88%	-2.92%	11.42%
0. Cumulative Gains/(Losses) deferred into the future *	\$ 4,296	\$ 336	\$ 2,433	\$ 1,178	\$ 142	\$ 1,875	\$ 3,603	\$ (239)	\$ 5,288
1. Actuarial Value of Assets [(1) - (10)]**	\$ 39,731	\$ 45,134	\$ 49,887	\$ 56,842	\$ 61,137	\$ 65,614	\$ 72,513	\$ 76,885	\$ 83,953

\* See Chart on the following page for the development of the amount of gains/(losses) deferred into the future at each valuation date.

\*\* To determine the actuarial value of assets for each plan, the ratio of actuarial value to market value for the PERF (ratio of actuarial value to book value for years before 1995) is applied to the market value of each plan's assets.

CALPERS ACTUARIAL VALUATION - JUNE 30, 1995  
SAFETY POLICE PLAN FOR ANYWHERE CITY  
EMPLOYER NUMBER XXX

Development of the Actuarial Value of Assets  
for the Public Employees' Retirement Fund  
Determination of Amounts of Gain/(Loss) to be Deferred as of Each Valuation Date  
(in Millions)

Fiscal Year of Gain/(Loss)	Total Gain/(Loss)	Gain/(Loss) as % of Market Value	Portion of Gain/(Loss) Spread Over					Amounts Deferred as of								
			Two Years	Three Years	Four Years	Five Years	6/30/87	6/30/88	6/30/89	6/30/90	6/30/91	6/30/92	6/30/93	6/30/94	6/30/95	
1984-85	4,833	24.30%	994	994	994	1,850	989	370	0	0	0	0	0	0	0	0
1985-86	5,525	19.32%	1,430	1,430	1,430	1,234	1,932	851	247	0	0	0	0	0	0	0
1986-87	2,534	6.71%	1,887	647	0	0	1,375	216	0	0	0	0	0	0	0	0
1987-88	(2,201)	-5.00%	(2,201)	0	0	0	N/A	(1,101)	0	0	0	0	0	0	0	0
1988-89	3,848	8.46%	2,274	1,575	0	0	N/A	N/A	2,186	525	0	0	0	0	0	0
1989-90	1,307	2.50%	1,307	0	0	0	N/A	N/A	N/A	654	0	0	0	0	0	0
1990-91	283	0.49%	283	0	0	0	N/A	N/A	N/A	N/A	142	0	0	0	0	0
1991-92	3,579	5.84%	3,064	515	0	0	N/A	N/A	N/A	N/A	N/A	1,875	172	0	0	0
1992-93	5,990	8.88%	3,374	2,616	0	0	N/A	N/A	N/A	N/A	N/A	N/A	3,431	872	0	0
1993-94	(2,221)	-2.92%	(2,221)	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(1,111)	0	0
1994-95	8,754	11.42%	3,832	3,832	1,089	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5,288	5,288
							4,295	336	2,433	1,178	142	1,875	3,603	(239)	5,288	5,288

**Reconciliation of the Actuarial Value of Assets Over the Prior Fiscal Year**

1) Beginning Balance 6/30/94	\$ 10,775,863
2) Contributions (Employer and Employee)*	490,555
3) Benefit Payments	431,534
4) Refunds	4,506
5) Actuarial Value of Amount Transferred to Employer Surplus Asset Account	20,658
6) Investment Earnings Credited	1,065,869
7) Assets transferred to/(from) the plan due to the retroactive PPPA reversion	<u>73,368</u>
8) Ending Balance 6/30/95 [(1)+(2)-(3)-(4)-(5)+(6)+(7)]	\$ 11,948,957

\* In accordance with Generally Accepted Accounting Principles (GAAP), the CalPERS Fiscal Services Division's accounting records include accounts receivable to recognize income that is measurable and due. When CalPERS receives payroll information, it determines the amount receivable for employer and employee contributions. Thus, CalPERS accounts receivable reflect contributions due, even if not paid.

Numbers may not add due to rounding.

## **Appendix A**

### **STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS**

## **Actuarial Methods**

### *Funding Method*

The actuarial funding method used for this report is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for members entitled to deferred benefits, is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

The excess of the total actuarial accrued liability over the value of plan assets is called the unfunded actuarial accrued liability. Funding requirements are determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of assumed future payroll. Commencing with fiscal year 1997-98, the amortization period for most public agency plans is 3 years, 14 years, or 19 years (funding horizons of 2000, 2011, and 2016 respectively).

A portion of assets in excess of Entry Age Normal accrued liability may, by state statute, be applied as a direct offset to required contributions. The use of such surplus is being phased out over the period of July 1, 1992 through June 30, 1997.

### *Purchasing Power Protection Act (PPPA) Method*

PPPA benefits are cost-of-living adjustments intended to maintain the individual's current retirement benefit at 75% of the original benefit at retirement adjusted for inflation since retirement. The PPPA benefit is paid, if necessary, in addition to any other cost-of-living adjustment provided under the terms of the plan. The total annual outlay for PPPA benefits is limited by State statute to the amount of earnings, up to 1.1%, on accumulated member contributions. If this annual outlay is insufficient to provide the PPPA benefits in a given fiscal year, the 75% maintenance target would be proportionately reduced. Since the inception of the PPPA benefit program, 1.1% has proven more than sufficient to provide the 75% maintenance. Under the inflation assumption of 4.5% compounded annually, the 1.1% appears to remain sufficient over the next 20 years or more on a pooled

basis, but not on a plan by plan basis. That is, some individual plans require more than the 1.1% return to fund that plan's PPPA benefits.

In August, 1995, the Board changed the PPPA administrative approach. The new approach requires that each plan pay as much of its own way for PPPA as possible, up to the full 1.1% of the investment return on that plan's employee assets. In this way cross-subsidization is minimized. The actuarial valuation mimics this change in the PPPA administrative procedure and derives employer rates as the lesser of two separate actuarially computed rates:

- 1) The rate that results if a full 1.1% of the investment return on the plan's employee assets is used for that plan's PPPA payments; or
- 2) The rate that results if the plan pays the full 75% purchasing power for itself.

This model is an appropriate reflection of the new PPPA administrative procedures. Those plans for which PPPA costs are 1.1% or more are charged a rate that replaces the 1.1%. Those plans that require less than the 1.1% to maintain 75% purchasing power are not charged the full 1.1%. Instead, they are charged the rate necessary to maintain the 75%. It should be noted that nothing is charged in the rates for any cross-subsidization. The model assumes that cross subsidization for PPPA will remain so small that it can be ignored. To the extent this assumption does not materialize, losses in some plans will occur and rates will increase.

#### Internal Revenue Code Section 415

The limitations on benefits imposed by Internal Revenue Code Section 415 was not taken into account in this valuation. The effect of these limitations has been deemed immaterial on the overall results of this valuation.



Asset Valuation Method

In order to dampen the effect of short term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. Each fiscal year's (July 1 through June 30) unrealized and realized gain/loss is spread across two to five years according to the following schedule.

Portion of the Gain/(Loss)	Years over which that portion of the Gain/Loss is spread
Less than 5% of market value	2 Years
Over 5% and less than 10% of market value	3 Years
Over 10% but less than 15% of market value	4 Years
Over 15% of market value	5 Years

As of a valuation date, the actuarial value of assets for the sum of all plans in the Public Employees' Retirement Fund (PERF) is set equal to the market value of assets less the sum of the portions of gains/losses deferred into future years by the method. The ratio of the total actuarial value of assets of the PERF to the total market value of assets of the PERF is then applied to the market value of each individual plan to determine its actuarial value.

## Actuarial Assumptions

### Economic Assumptions:

Investment Return	-	8.5% compounded annually net of investment return. This assumption is used for all plans.
Salary Growth	-	Annual increases that vary by duration of service. Sample rates are given below.

Duration of Service	Annual Percent Increase		
	Public Agency Miscellaneous	Public Agency Safety	
		Entry under Age 40	Entry 40 & Over
1	14.95%	12.34%	5.02%
2	14.95	12.34	5.02
3	7.11	8.16	5.02
4	7.11	8.16	5.02
5	7.11	8.16	5.02
10	5.55	5.91	5.02
15	5.55	5.91	5.02
20	5.55	5.91	5.02
25	5.55	5.91	5.02
30	5.55	5.91	5.02
35	4.50	5.91	5.02
40	4.50	5.91	5.02

Overall Payroll Growth	-	4.5% compounded annually (used in projecting the payroll over which the unfunded liability is amortized). This assumption is used for all plans.
Inflation	-	4.5% compounded annually. This assumption is used for all plans.

**Public Agency Miscellaneous 2% @ 60**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.02654	0.03684	61	0.12426	0.08696
51	0.01228	0.02559	62	0.23818	0.18980
52	0.01834	0.02773	63	0.21037	0.17706
53	0.01619	0.03078	64	0.14311	0.12882
54	0.02251	0.03071	65	0.24399	0.23837
55	0.04813	0.05390	66	0.13820	0.14190
56	0.03957	0.04576	67	0.11208	0.14001
57	0.04788	0.04213	68	0.11736	0.10330
58	0.05500	0.06735	69	0.09036	0.12344
59	0.06811	0.06523	70	1.00000	1.00000
60	0.12807	0.09825			

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

Entry <u>Age</u>	Termination with Refund (Male)					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.07141	0.15327	0.10537	0.09504	0.07720	0.06393
25	0.07018	0.14350	0.09987	0.08769	0.07244	0.04386
30	0.06896	0.13435	0.09465	0.08090	0.06797	0.03009
35	0.06777	0.12578	0.08971	0.07464	0.06377	0.02064
40	0.06660	0.11776	0.08502	0.06886	0.05984	0.01416
45	0.06544	0.11025	0.08058	0.06353	0.05615	0.00971
50	0.06431	0.10322	0.07637	0.05862	0.05268	0.00666
55	0.06320	0.09664	0.07238	0.05408	0.04943	0.00457
60	0.06211	0.09048	0.06860	0.04990	0.04638	0.00314

Entry <u>Age</u>	Termination with Refund (Female)					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.08630	0.18606	0.15121	0.12665	0.11838	0.07966
25	0.08532	0.17473	0.13666	0.11372	0.09983	0.05601
30	0.08435	0.16410	0.12350	0.10211	0.08419	0.03939
35	0.08339	0.15411	0.11162	0.09169	0.07099	0.02770
40	0.08245	0.14473	0.10087	0.08233	0.05987	0.01948
45	0.08151	0.13592	0.09116	0.07392	0.05049	0.01370
50	0.08059	0.12765	0.08239	0.06638	0.04257	0.00963
55	0.07967	0.11988	0.07446	0.05960	0.03590	0.00677
60	0.07877	0.11258	0.06729	0.05352	0.03028	0.00476

Ordinary Death	-	Rates that vary by age. See sample rates in table below.
Ordinary Disability	-	Rates that vary by age. See sample rates in table below.
Termination with Vested Deferred Benefits	-	Rates that vary by age. See sample rates in table below.

Attained Age	Male			Female		
	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits
20	0.00027	0.00048	0.02023	0.00007	0.00032	0.03299
25	0.00039	0.00070	0.01818	0.00012	0.00047	0.02910
30	0.00055	0.00102	0.01633	0.00018	0.00069	0.02567
35	0.00078	0.00148	0.01467	0.00028	0.00102	0.02264
40	0.00110	0.00215	0.01318	0.00044	0.00150	0.01997
45	0.00155	0.00313	0.01184	0.00069	0.00220	0.01762
50	0.00219	0.00456	0.00000	0.00108	0.00322	0.00000
55	0.00310	0.00663	0.00000	0.00169	0.00473	0.00000
60	0.00438	0.00000	0.00000	0.00264	0.00000	0.00000

**Public Agency Miscellaneous 2% @ 55**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.03466	0.04811	61	0.13474	0.09430
51	0.01617	0.03369	62	0.24803	0.19765
52	0.02439	0.03688	63	0.21037	0.17706
53	0.02177	0.04137	64	0.14311	0.12882
54	0.03053	0.04165	65	0.24399	0.23837
55	0.06593	0.07384	66	0.13820	0.14190
56	0.05232	0.06050	67	0.11208	0.14001
57	0.06106	0.05372	68	0.11736	0.10330
58	0.06745	0.08260	69	0.09036	0.12344
59	0.08032	0.07693	70	1.00000	1.00000
60	0.14485	0.11112			

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Termination with Refund (Male)</u>						
<u>Entry Age</u>	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.07039	0.14989	0.10218	0.09133	0.07347	0.06020
25	0.06817	0.13716	0.09381	0.08084	0.06543	0.03874
30	0.06601	0.12546	0.08605	0.07142	0.05810	0.02482
35	0.06390	0.11468	0.07883	0.06298	0.05143	0.01582
40	0.06184	0.10477	0.07214	0.05541	0.04536	0.01003
45	0.05983	0.09566	0.06593	0.04864	0.03985	0.00631
50	0.05788	0.08774	0.06110	0.04396	0.03688	0.00433
55	0.05688	0.08215	0.05791	0.04056	0.03460	0.00297
60	0.05589	0.07691	0.05488	0.03742	0.03247	0.00204

<u>Termination with Refund (Female)</u>						
<u>Entry Age</u>	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.08507	0.18195	0.14663	0.12170	0.11265	0.07501
25	0.08288	0.16702	0.12837	0.10484	0.09017	0.04948
30	0.08074	0.15324	0.11228	0.09015	0.07197	0.03250
35	0.07863	0.14051	0.09809	0.07736	0.05725	0.02124
40	0.07656	0.12877	0.08559	0.06625	0.04538	0.01380
45	0.07453	0.11793	0.07459	0.05660	0.03583	0.00890
50	0.07253	0.10850	0.06591	0.04978	0.02980	0.00626
55	0.07170	0.10189	0.05957	0.04470	0.02513	0.00440
60	0.07089	0.09569	0.05383	0.04014	0.02119	0.00310

Ordinary Death	-	Rates that vary by age. See sample rates in table below.
Ordinary Disability	-	Rates that vary by age. See sample rates in table below.
Termination with Vested Deferred Benefits	-	Rates that vary by age. See sample rates in table below.

Attained Age	Male			Female		
	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits
20	0.00027	0.00048	0.02023	0.00007	0.00032	0.03299
25	0.00039	0.00070	0.01818	0.00012	0.00047	0.02910
30	0.00055	0.00102	0.01633	0.00018	0.00069	0.02567
35	0.00078	0.00148	0.01467	0.00028	0.00102	0.02264
40	0.00110	0.00215	0.01318	0.00044	0.00150	0.01997
45	0.00155	0.00313	0.01184	0.00069	0.00220	0.01762
50	0.00219	0.00456	0.00000	0.00108	0.00322	0.00000
55	0.00310	0.00663	0.00000	0.00169	0.00473	0.00000
60	0.00438	0.00000	0.00000	0.00264	0.00000	0.00000

**Public Agency Fire 2% @ 50**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.03673	56	0.11305
51	0.03475	57	0.09843
52	0.06045	58	0.11843
53	0.11071	59	0.10456
54	0.15878	60	1.00000
55	0.22109		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

Entry <u>Age</u>	Termination with Refund					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.03915	0.03743	0.03579	0.03423	0.03273	0.01109
25	0.03129	0.02992	0.02861	0.02736	0.02616	0.00663
30	0.02501	0.02392	0.02287	0.02187	0.02091	0.00397
35	0.02000	0.01912	0.01828	0.01748	0.01672	0.00238
40	0.01598	0.01528	0.01461	0.01397	0.01336	0.00142
45	0.01278	0.01222	0.01168	0.01117	0.01068	0.00085
50	0.01021	0.00977	0.00934	0.00893	0.00854	0.00051
55	0.00816	0.00781	0.00746	0.00714	0.00683	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability - Rates that vary by age. See sample rates in table below.

Attained <u>Age</u>					Termination with Vested
	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>	<u>Deferred Benefits</u>
20	0.00017	0.00009	0.00040	0.00011	0.00669
25	0.00020	0.00015	0.00073	0.00014	0.00590
30	0.00023	0.00024	0.00133	0.00018	0.00521
35	0.00028	0.00039	0.00242	0.00023	0.00460
40	0.00033	0.00062	0.00441	0.00029	0.00406
45	0.00039	0.00099	0.00802	0.00038	0.00358
50	0.00046	0.00158	0.01460	0.00048	0.00000
55	0.00054	0.00000	0.02658	0.00062	0.00000

**Public Agency Fire other than 2% @ 50**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.01588	56	0.11079
51	0.00000	57	0.00000
52	0.03442	58	0.09499
53	0.01990	59	0.04409
54	0.04132	60	1.00000
55	0.07513		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

Entry <u>Age</u>	<u>Termination with Refund</u>					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.04837	0.04717	0.04600	0.04486	0.04374	0.01190
25	0.04266	0.04160	0.04057	0.03956	0.03858	0.01029
30	0.03762	0.03668	0.03577	0.03488	0.03402	0.00891
35	0.03317	0.03235	0.03155	0.03076	0.03000	0.00771
40	0.02925	0.02853	0.02782	0.02713	0.02645	0.00667
45	0.02580	0.02516	0.02453	0.02392	0.02333	0.00577
50	0.02275	0.02218	0.02163	0.02110	0.02057	0.00500
55	0.02006	0.01956	0.01908	0.01860	0.01814	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability - Rates that vary by age. See sample rates in table below.  
Industrial Death, Termination with Vested Deferred Benefits

Attained <u>Age</u>						Termination with Vested
	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>		<u>Deferred Benefits</u>
20	0.00017	0.00009	0.00013	0.00011		0.01076
25	0.00020	0.00015	0.00027	0.00014		0.01000
30	0.00023	0.00024	0.00057	0.00018		0.00930
35	0.00028	0.00039	0.00120	0.00023		0.00864
40	0.00033	0.00062	0.00251	0.00029		0.00803
45	0.00039	0.00099	0.00527	0.00038		0.00746
50	0.00046	0.00158	0.01105	0.00048		0.00000
55	0.00054	0.00000	0.02315	0.00062		0.00000



**Public Agency Police 2% @ 50\***

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.05857	56	0.11855
51	0.04340	57	0.07146
52	0.04165	58	0.08968
53	0.15350	59	0.08743
54	0.17021	60	1.00000
55	0.18571		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

Entry <u>Age</u>	Termination with Refund					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.04373	0.08438	0.04756	0.04644	0.04650	0.03226
25	0.04758	0.08654	0.04711	0.04415	0.04182	0.01934
30	0.05177	0.08876	0.04666	0.04197	0.03761	0.01159
35	0.05633	0.09103	0.04622	0.03990	0.03382	0.00695
40	0.06128	0.09337	0.04579	0.03794	0.03041	0.00417
45	0.06668	0.09576	0.04535	0.03607	0.02735	0.00250
50	0.07255	0.09821	0.04492	0.03429	0.02459	0.00150
55	0.07893	0.10072	0.04450	0.03260	0.02211	0.00000

Ordinary Death, Ordinary

Disability, Industrial Disability - Rates that vary by age. See sample rates

Industrial Death, Termination with Vested Deferred Benefits in table below.

Attained <u>Age</u>					Termination with Vested
	Ordinary <u>Death</u>	Ordinary <u>Disability</u>	Industrial <u>Disability</u>	Industrial <u>Death</u>	Deferred <u>Benefits</u>
20	0.00017	0.00018	0.00250	0.00011	0.01309
25	0.00020	0.00024	0.00347	0.00014	0.01155
30	0.00023	0.00033	0.00482	0.00018	0.01018
35	0.00028	0.00044	0.00669	0.00023	0.00898
40	0.00033	0.00060	0.00928	0.00029	0.00792
45	0.00039	0.00082	0.01289	0.00038	0.00699
50	0.00046	0.00112	0.01789	0.00048	0.00000
55	0.00054	0.00000	0.02484	0.00062	0.00000

\* These rates also apply to School Police. The only difference is the industrial disability rate. The School Police use a percentage of the rate displayed above, based on the actuary's best estimate.

**Public Agency Police other than 2% @ 50\***

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.02552	56	0.06921
51	0.00000	57	0.05113
52	0.01637	58	0.07241
53	0.02717	59	0.07043
54	0.00949	60	1.00000
55	0.16674		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry Age</u>	<u>Termination with Refund</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.05709	0.05768	0.05828	0.05888	0.05949	0.03497
25	0.06011	0.06073	0.06135	0.06199	0.06263	0.02683
30	0.06328	0.06393	0.06459	0.06526	0.06593	0.02058
35	0.06662	0.06730	0.06800	0.06870	0.06941	0.01578
40	0.07013	0.07085	0.07159	0.07233	0.07307	0.01211
45	0.07383	0.07459	0.07536	0.07614	0.07693	0.00929
50	0.07772	0.07853	0.07934	0.08016	0.08099	0.00712
55	0.08183	0.08267	0.08353	0.08439	0.08526	0.00000

Ordinary Death, Ordinary

Disability, Industrial Disability - Rates that vary by age. See sample rates

Industrial Death, Termination with Vested Deferred Benefits in table below.

<u>Attained Age</u>	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>	<u>Termination with Vested Deferred Benefits</u>
20	0.00017	0.00069	0.00260	0.00011	0.01516
25	0.00020	0.00118	0.00355	0.00014	0.01424
30	0.00023	0.00167	0.00483	0.00018	0.01338
35	0.00028	0.00216	0.00658	0.00023	0.01257
40	0.00033	0.00265	0.00896	0.00029	0.01180
45	0.00039	0.00313	0.01221	0.00038	0.01109
50	0.00046	0.00362	0.01663	0.00048	0.00000
55	0.00054	0.00000	0.02266	0.00062	0.00000

\* These rates also apply to School Police. The only difference is the industrial disability rate. The School Police use a percentage of the rate displayed above, based on the actuary's best estimate.

## **Appendix B**

### **SUMMARY OF PRINCIPAL PLAN PROVISIONS**

**SUMMARY OF BENEFITS: COVERAGE GROUP 75001**

The following is a summary of the major plan provisions used in calculating the liabilities of the plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

## RETIREMENT PROGRAM

### Service Retirement

#### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2% at 50** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement Age</b>	<b>2% at 50 Factor</b>
50	2.0000%
51	2.1400%
52	2.2800%
53	2.4200%
54	2.5600%
55 & Up	2.7000%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is capped at 75% of final compensation.

### Vested Deferred Retirement

**Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

**Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

**Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

**Non-Industrial (Non-Job Related) Disability Retirement**

**Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

**Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

**Industrial (Job-Related) Disability Retirement**

**Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

**Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a member who entered into CalPERS after 1/1/80, the Industrial Disability benefit is limited to the amount he or she would have received for service retirement, if credited service were projected to age 55. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of the accumulated member contributions with respect to employment in this group.

**Post-Retirement Death Benefit**

**Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$500 will be made to the retiree's designated survivor(s), or to the retiree's estate.

**Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

**Pre-Retirement Death Benefits**

**Basic Death Benefit**

**Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

**Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 8.5% per year, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

**1957 Survivor Benefit**

**Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death or remarriage of the spouse. The spouse may elect to receive a reduced allowance that would not end upon remarriage. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

## **Special Death Benefit**

### **Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

### **Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation. The allowance is payable to the surviving spouse until death or remarriage, at which time the allowance is continued to any unmarried children under age 22. The spouse may elect to receive a reduced allowance that would not end upon remarriage. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

## **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon the following schedule. The employer may choose to "pick-up" these contributions for the employees.

The percent contributed below the monthly compensation breakpoint is 0%.

The monthly compensation breakpoint is \$0.

The percent contributed above the monthly compensation breakpoint is 9%.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.



**CalPERS**  
**Actuarial & Employer Services Division**  
P.O. Box 942709  
Sacramento, CA 94229-2709  
Telecommunications Device for the Deaf - (916) 326-3240  
(916) 326-3420 FAX (916) 326-3005

August 18, 1998

**SAFETY POLICE PLAN OF THE CITY OF ANYWHERE**

Dear Employer,

Enclosed please find a copy of the June 30, 1996, actuarial valuation of your pension plan (a separate report is included for each plan). This valuation report contains important actuarial information about your pension plan at CalPERS. CalPERS staff actuaries are available to discuss the actuarial report with you.

Included on page 2 of the report is the funded status of your plan as of June 30, 1996. The liability shown is the Entry Age Normal Accrued Liability, based on the method used to fund your plan. The calculation of this liability is based on the participants in your plan on June 30, 1996, the assets of your plan on June 30, 1996, the actuarial assumptions adopted by the CalPERS Board for your plan, and the benefits for which you have contracted with CalPERS as of June 30, 1997. A three year historic trend of this funded status is provided on the same page for those agencies for whom the last three annual valuations have been performed.

Amounts remaining in your surplus account, if any, as of June 30, 1996, were projected to June 30, 1997, and unused amounts were taken into account in setting your new contribution rate for the fiscal year July 1, 1998 through June 30, 1999. Your new rate for the SAFETY POLICE PLAN is 3.678%. A reconciliation from your current 1997-98 rate to your new 1998-99 rate, broken down by reason for the change, is provided on page 8 of the report.

Also, please note that Governmental Accounting Standards Board (GASB) Statement Number 27 entitled "Accounting for Pensions by State and Local Governmental Employers" will apply to you beginning with the July 1, 1997 through June 30, 1998, fiscal year. CalPERS will issue a comprehensive Circular Letter in the third quarter of fiscal 97-98 to provide guidance with regard to this new accounting standard. You should be aware that items in this and the previous valuation reports will be needed in the preparation of disclosures and accounting information required by GASB 27.

If you have questions, please call your assigned actuary.

Sincerely,



Ron Seeling, Chief Actuary  
Actuarial & Employer Services Division

**ACTUARIAL VALUATION**  
**AS OF JUNE 30, 1996**

**for the**  
**SAFETY POLICE PLAN**  
**of the**  
**CITY OF ANYWHERE**  
**(EMPLOYER # XXX)**

**REQUIRED CONTRIBUTIONS**  
**FOR FISCAL YEAR**  
**JULY 1, 1998 - JUNE 30, 1999**

California Public Employees' Retirement System  
P.O. Box 942709  
Sacramento, CA 94229-2709  
(916) 326-3420

### **Actuarial Certification**

To the best of our knowledge, this report is complete and accurate and contains sufficient information to fully and fairly disclose the funded condition of the SAFETY POLICE PLAN OF THE CITY OF ANYWHERE. This valuation is based on the employee data provided, the statement of assets provided by the CalPERS Fiscal Services Division, and the benefits provided under this contract with CalPERS. It is our opinion that the valuation has been performed by qualified actuaries in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for this plan.



Leo Aguinaldo A.S.A., M.A.A.A.  
Associate Pension Actuary, CalPERS



Ron Seeling, Ph.D., F.C.A., A.S.A., M.A.A.A.  
Enrolled Actuary  
Chief Actuary, CalPERS

## Purpose of the Report

This actuarial valuation of the SAFETY POLICE PLAN OF THE CITY OF ANYWHERE of the California Public Employees' Retirement System (CalPERS) was performed by CalPERS' staff actuaries as of June 30, 1996, in order to:

- set forth the actuarial assets and funding liabilities of this plan as of June 30, 1996;
- establish the actuarially required contribution rates of this plan for the fiscal year July 1, 1998 through June 30, 1999; and
- provide actuarial information as of June 30, 1996 to the CalPERS Board of Administration and other interested parties.

Use of this report for other purposes, such as for disclosure under Governmental Accounting Standards Board Statement No. 5, is inappropriate.

Numbers in exhibits may not add due to rounding.

## Employer Contribution Rate

The actuarially required contribution, both in projected dollars and as a rate of projected payroll, for the fiscal year July 1, 1998 through June 30, 1999, are shown below:

	Expected Dollar Amount	Percent of Projected Payroll
Payment for Normal Cost	\$ 321,427	13.109%
Payment on Amortization Bases	(231,257)	(9.431%)
Payment for 1959 Survivor Benefit Program*	0	0.000%
Total (not less than zero)	\$ 90,170	3.678%

\*This is for first and second level only. The third and fourth level contributions are billed separately.

## Funded Status of the Plan

The table below displays a short history of the Entry Age Normal Accrued Liability, the Actuarial Value of Assets, the Unfunded Liability or (Excess Assets), Funded Status (i.e., the ratio of the Actuarial Value of Assets to Entry Age Normal Accrued Liability), the estimated annual covered payroll and the Unfunded Actuarial Accrued Liability (UAAL) as a percentage of that covered payroll. For those plans that include 1<sup>st</sup> or 2<sup>nd</sup> level 1959 Survivor Benefit, the liabilities and assets below include the assets and liabilities for current beneficiaries of your 1959 Survivor Benefit program. For all other plans, the assets and liabilities below are without regard to the 1959 Survivor Benefit program.

### Funded Status of the Plan

Valuation Date	Entry Age Normal Accrued Liability	Actuarial Value of Assets	Unfunded Liability/ (Excess Assets)	Funded Status	Annual Covered Payroll	UAAL As a % of Payroll
6/30/94	\$ 10,435,112	\$ 10,775,863	\$ (340,751)	103.3%	\$ 2,241,435	(15.202%)
6/30/95	11,866,326	11,948,957	(82,631)	100.7%	2,292,410	(3.605%)
6/30/96	13,161,922	13,662,168	(500,246)	103.8%	2,148,655	(23.282%)

## Changes Since Prior Valuation

**Actuarial Assumptions** - There were no changes in actuarial assumptions since the prior year's actuarial valuation.

**Methods** - The overall funding method for pension benefits, Entry Age Normal, remains unchanged since the prior valuation. However, several minor changes in funding methods have been made since the prior valuation. These changes are:

- The funding method for the 1959 Survivor Benefit program has been changed to a modified Term Insurance method. This change affects the rates established in this report only for those plans with members covered by the 1<sup>st</sup> or 2<sup>nd</sup> level of the 1959 Survivor Benefit program.
- According to State statute, the portion of surplus used as a direct offset of employer contributions has been lowered from 20% of such surplus as of the prior valuation to 0% of such surplus as of the current valuation. **Commencing July 1, 1997, all surplus assets are used to lower employer contributions through the regular amortization process.** This valuation projects the unfunded liability/(excess assets) to June 30, 1998, and amortizes the result over the plan's remaining amortization period.
- The CalPERS Board has adopted new policies regarding the amortization of the unfunded liability/(excess assets). The first phase of this new policy is implemented in this valuation. That first step is to combine the prior service unfunded liability and the current service unfunded liability into a single initial unfunded liability and to establish a single funding horizon for this initial unfunded liability. The new single funding horizon for your plan is June 30, 2000.

The effect of each of these changes on the contribution rate is shown on page 8 of this report.

**New Actuarial Valuation System** - Since the prior year's actuarial valuation, a new actuarial valuation system has been installed. The new valuation system enhances the accuracy of the calculation of the liabilities and provides more consistency in the application of actuarial principles. The changes in the 1998-99 rate due to the differences between the old and new actuarial valuation software are shown on page 8 of this report.

**Benefits** - Liabilities in this report generally reflect plan changes effective on or before June 30, 1997, and so recognize all plan changes between July 1, 1996 and June 30, 1997. Please refer to Appendix B for a summary of plan provisions used in this valuation.

## Comparison of Current and Prior Year Results

Shown below are the comparisons of key valuation results for the current valuation date compared to corresponding values from the prior valuation date.

<b>General Information</b>	<b><u>June 30, 1995</u></b>	<b><u>June 30, 1996</u></b>
Members Included in the Valuation *		
Active Members	52	49
Transfers	12	13
Vested Terminations	6	7
Receiving Payments	<u>24</u>	<u>26</u>
Total	94	95
Annual Covered Payroll	\$ 2,292,410	\$ 2,148,655
Projected Annual Payroll	\$ 2,503,369	\$ 2,451,973
Average Annual Pay	\$ 44,085	\$ 43,850
Average Attained Age for Actives	36.46	36.77
Average Entry Age for Actives (into CalPERS for 1995, into Rate Plan for 1996)	26.75	27.00
Total Assets at Market Value	\$ 12,702,197	\$ 14,671,572
<b>1959 Survivor Benefit Program (1<sup>st</sup> or 2<sup>nd</sup> level)</b>		
Present Value of Benefits for Current Beneficiaries	\$ 0	\$ 0
Actuarial Value of Assets	<u>0</u>	<u>0</u>
Unfunded Liability/(Excess Assets)	\$ 0	\$ 0
<b>Retirement Program</b>		
Present Value of Projected Benefits	\$ 16,285,563	\$ 18,650,560
Entry Age Normal Accrued Liability	\$ 11,866,326	\$ 13,161,922
Actuarial Value of Assets	<u>11,948,957</u>	<u>13,662,168</u>
Unfunded Liability/(Excess Assets)	\$ (82,631)	\$ (500,246)
New "Surplus" at Valuation Date	\$ 21,960	\$ 0
Prior Years' "Surplus" at Valuation Date	<u>0</u>	<u>0</u>
Total "Surplus" at Valuation Date	\$ 21,960	\$ 0
<b>Required Contributions</b>		
Employer Contribution Required (in Projected Dollars)		
Payment for Normal Cost	\$ 323,860	\$ 321,427
Payment on Amortization Bases **	(70,355)	(231,257)
Payment for 1959 Survivor Benefit Program***	<u>0</u>	<u>0</u>
Total (not less than zero)	\$ 253,504	\$ 90,170
Employer Contribution Required (Percent of Projected Payroll)		
Payment for Normal Cost	12.937%	13.109%
Payment on the Amortization Bases **	(2.810%)	(9.431%)
Payment for 1959 Survivor Benefit Program***	<u>0.000%</u>	<u>0.000%</u>
Total (not less than zero)	10.127%	3.678%

\* Counts of members included in the valuation are counts of records processed by the valuation. Multiple records may exist for those who have service in more than one coverage group. This does not result in a double counting of liabilities. Counts do not include beneficiaries of 3rd or 4th level 1959 Survivor Benefit.

\*\* Details regarding this payment can be found on Page 7.

\*\*\* This is for first and second level only. The third and fourth level contributions are billed separately.

### Development of Accrued and Unfunded Liabilities for the Retirement Program

1. Present Value of Benefits	
a) Actives, Transfers and Vested Terminated	\$ 12,202,186
b) Receiving Payments	<u>6,448,374</u>
c) Total	\$ 18,650,560
2. Present Value of Future Employer Normal Costs	\$ 3,219,658
3. Present Value of Future Employee Contributions	<u>2,268,980</u>
4. Entry Age Normal Accrued Liability [(1c) - (2) - (3)]	\$ 13,161,922
5. Actuarial Value of Assets*	
a) Employer Reserves	\$ 10,944,879
b) Active Employee Account Balances	<u>2,717,289</u>
c) Total Valuation Assets	\$ 13,662,168
6. Unfunded Accrued Liability/(Excess Assets) [(4) - (5c)]	\$ (500,246)

\* Does not include "surplus", if any, at the valuation date.

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### Gain/(Loss) Analysis 6/30/95 - 6/30/96 for the Retirement Program

#### Amounts at the Beginning of the Year

1) Accrued Liability	\$ 11,866,326
2) Actuarial Value of Assets	<u>11,948,957</u>
3) Unfunded Liability/(Excess Assets) [(1)-(2)]	\$ (82,631)
4) Employer Normal Cost plus Actual Employee Contributions	\$ 505,936

#### Amounts Paid During the Year

5) Employer and Employee Contributions	\$ 534,281
6) Benefit Payments	454,414
7) Refunds	0

#### Expected Amounts at the End of the Year

8) Expected Accrued Liability	
$[(1)+(4))*1.085-((6)+(7))*1.0425]$	\$ 12,950,178
9) Expected Actuarial Value of Assets	
$[(2)*1.085+((5)-(6)-(7))*1.0425]$	<u>13,047,880</u>
10) Expected Unfunded Liability/(Excess Assets)	
$[(8)-(9)]$	\$ (97,702)

#### Actual Amounts at the End of the Year (before all other changes)\*

11) Actual Accrued Liability	\$ 13,072,481
12) Actual Actuarial Value of Assets**	<u>13,560,590</u>
13) Actual Unfunded Liability/(Excess Assets)	\$ (488,109)
$[(11)-(12)]$	

#### Gain/(Loss) for the Year

14) Liability Gain/(Loss)	
$[(8)-(11)]$	\$ (122,303)
15) Asset Gain/(Loss)	
$[(12)-(9)]$	<u>512,710</u>
16) Total Gain/(Loss)	
$[(14)+(15)]$	\$ 390,407

\* All gains and losses are determined using the prior year's assumptions, plan provisions and methods.

\*\* This asset amount does not include "surplus", if any, at the valuation date. Further, it is based on the prior year's rule of transferring 20% of excess assets, if any, to new surplus. For these reasons, this asset amount does not agree with other asset amounts shown in this report.



Schedule of Amortization Bases for the Retirement Program

<u>Reason for Base</u>	<u>Date Established</u>	<u>Initial Amount</u>	<u>Date of First Payment</u>	<u>Date of Final Payment</u>	<u>Amount as of Date of First Payment</u>	<u>Amounts for Fiscal 1998 - 1999</u>	
						<u>Unpaid Balance at Beginning of Fiscal Year</u>	<u>Scheduled Payment for the Fiscal Year</u>
Initial Unfunded	6/30/1996	\$(500,246)	7/1/1998	6/30/2000	\$(435,842)	\$(435,842)	\$(231,257)

## Reconciliation of Employer Contribution Rates

1) Calculated Contribution Rate for 7/1/97 - 6/30/98*	10.127%
2) Effect of changes since the prior valuation	
a) Effect of changes in 1959 Survivor Benefit program**	0.000%
b) Effect of changes in demographics and financial results	(10.127%)
c) Effect of plan amendments between 6/30/96 and 6/30/97	0.000%
d) Effect of change to new amortization method	3.696%
e) Effect of changes in actuarial assumptions	0.000%
f) Effect of the phasing-out of surplus (20% to 0%)	(3.029%)
g) Effect of new actuarial valuation system enhancements	3.011%
h) Net effect of the changes above [Sum of (a) through (g)]	(6.449%)
3) Contribution Rate for 7/1/98 - 6/30/99 [(1)+(2h)]	3.678%

## Reconciliation of Estimated Employer Contributions

(Based on projected annual payroll)

1) Contribution Required for 7/1/97-6/30/98*	\$ 253,504
2) Effect of changes since the prior valuation	
a) Effect of change in payroll	\$ (5,205)
b) Effect of changes in 1959 Survivor Benefit program**	0
c) Effect of changes in demographics and financial results	(248,311)
d) Effect of plan amendments between 6/30/96 and 6/30/97	0
e) Effect of change to new amortization method	90,625
f) Effect of changes in actuarial assumptions	0
g) Effect of the phasing-out of surplus (20% to 0%)	(74,270)
h) Effect of new actuarial valuation system enhancements	73,829
i) Net effect of the changes above [Sum of (a) through (h)]	\$ (163,332)
3) Estimated Contribution Required for 7/1/98 - 6/30/99 [(1)+2(i)]	\$ 90,170

\* The contribution actually paid may be different if a prepayment of unfunded actuarial liability is made or a funding extension is granted.

\*\*Contributions for the 3<sup>rd</sup> and 4<sup>th</sup> level of the 1959 Survivor Benefit program are billed separately. Therefore, for agencies that changed from 1<sup>st</sup> or 2<sup>nd</sup> level to 3<sup>rd</sup> or 4<sup>th</sup> level, the display above will show a change to a zero rate for the 1959 Survivor Benefit program.

**Development of the Actuarial Value of Assets  
for the Public Employees' Retirement Fund  
(in Millions)**

	As of <u>6/30/88</u>	As of <u>6/30/89</u>	As of <u>6/30/90</u>	As of <u>6/30/91</u>	As of <u>6/30/92</u>	As of <u>6/30/93</u>	As of <u>6/30/94</u>	As of <u>6/30/95</u>	As of <u>6/30/96</u>
1. Market Value of Assets	\$ 45,470	\$ 52,320	\$ 58,020	\$ 61,278	\$ 67,489	\$ 76,116	\$ 76,646	\$ 89,241	\$101,471
2. Book Value of Assets	<u>40,208</u>	<u>44,630</u>	<u>51,584</u>	<u>55,272</u>	<u>59,827</u>	<u>64,014</u>	<u>68,154</u>	<u>74,937</u>	<u>79,991</u>
3. Cumulative Unrealized Gain/(Loss) as of the current June 30 [(1) - (2)]	\$ 5,262	\$ 7,690	\$ 6,436	\$ 6,006	\$ 7,662	\$ 12,102	\$ 8,492	\$ 14,304	\$ 21,480
4. Cumulative Unrealized Gain/(Loss) as of the prior 6/30	<u>8,854</u>	<u>5,262</u>	<u>7,690</u>	<u>6,436</u>	<u>6,006</u>	<u>7,662</u>	<u>12,102</u>	<u>8,492</u>	<u>14,304</u>
5. Unrealized Gain/(Loss) for the prior fiscal year [(3) - (4)]	\$ (3,592)	\$ 2,428	\$ (1,254)	\$ (430)	\$ 1,656	\$ 4,440	\$ (3,610)	\$ 5,812	\$ 7,176
6. Realized Gain/(Loss) for the prior fiscal year	<u>1,391</u>	<u>1,420</u>	<u>2,561</u>	<u>713</u>	<u>1,923</u>	<u>1,550</u>	<u>1,389</u>	<u>2,942</u>	<u>1,680</u>
7. Total Gain/(Loss) for the prior fiscal year [(5)+(6)]	\$ (2,201)	\$ 3,848	\$ 1,307	\$ 283	\$ 3,579	\$ 5,990	\$ (2,221)	\$ 8,754	\$ 8,856
8. Market Value as of the prior June 30 <sup>th</sup>	\$ 44,027	\$ 45,470	\$ 52,320	\$ 58,020	\$ 61,278	\$ 67,489	\$ 76,116	\$ 76,646	\$ 89,241
9. Total Gain/(Loss) for the prior year as a percent of the Market Value [(7)/(8)]	(5.00)%	8.46%	2.50%	0.49%	5.84%	8.88%	(2.92)%	11.42%	9.92%
10. Cumulative Gains/(Losses) deferred into the future*	\$ 336	\$ 2,433	\$ 1,178	\$ 142	\$ 1,875	\$ 3,603	\$ (239)	\$ 5,288	\$ 6,982
11. Actuarial Value of Assets [(1) - (10)]**	\$ 45,134	\$ 49,887	\$ 56,842	\$ 61,137	\$ 65,614	\$ 72,513	\$ 76,885	\$ 83,953	\$ 94,489

\* See Chart on the following page for the development of the amount of gains/(losses) deferred into the future at each valuation date.

\*\* To determine the actuarial value of assets for each plan, the ratio of actuarial value to market value for the PERF (ratio of actuarial value to book value for years before 1995) is applied to the market value of each plan's assets.

**Determination of Amounts of Gain/(Loss) to be Deferred as of Each Valuation Date  
(in Millions)**

Fiscal Year of Gain/(Loss)	Total Gain (Loss)	Gain/(Loss) as % of Market Value	Portion of Gain/(Loss) Spread Over				Amounts Deferred as of							
			Two Years	Three Years	Four Years	Five Years	6/30/89	6/30/90	6/30/91	6/30/92	6/30/93	6/30/94	6/30/95	6/30/96
1984-85	4,833	24.30%	994	994	994	1,850	0	0	0	0	0	0	0	0
1985-86	5,525	19.32%	1,430	1,430	1,430	1,234	247	0	0	0	0	0	0	0
1986-87	2,534	6.71%	1,887	647	0	0	0	0	0	0	0	0	0	0
1987-88	(2,201)	(5.00%)	(2,201)	0	0	0	0	0	0	0	0	0	0	0
1988-89	3,848	8.46%	2,274	1,575	0	0	2,186	525	0	0	0	0	0	0
1989-90	1,307	2.50%	1,307	0	0	0	N/A	654	0	0	0	0	0	0
1990-91	283	0.49%	283	0	0	0	N/A	N/A	142	0	0	0	0	0
1991-92	3,579	5.84%	3,064	515	0	0	N/A	N/A	N/A	1,875	172	0	0	0
1992-93	5,990	8.88%	3,374	2,616	0	0	N/A	N/A	N/A	N/A	3,431	872	0	0
1993-94	(2,221)	(2.92%)	(2,221)	0	0	0	N/A	N/A	N/A	N/A	N/A	(1,111)	0	0
1994-95	8,754	11.42%	3,832	3,832	1,089	0	N/A	N/A	N/A	N/A	N/A	N/A	5,288	1,822
1995-96	8,856	9.92%	4,462	4,394	0	0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>5,160</u>
							2,433	1,178	142	1,875	3,603	(239)	5,288	6,982

### Reconciliation of the Actuarial Value of Assets Over the Prior Fiscal Year

<u>Retirement Program</u>		
1) Beginning Balance 6/30/95	\$	11,948,957
2) Employer Contributions*		324,913
3) Employee Contributions*		209,368
4) Benefit Payments		454,414
5) Refunds		0
6) Investment Earnings Credited		<u>1,633,344</u>
7) Ending Balance 6/30/96 [(1)+(2)+(3)-(4)-(5)+(6)]	\$	13,662,168

### 1959 Survivor Benefit Program (1<sup>st</sup> or 2<sup>nd</sup> Level)

1) Beginning Balance 6/30/95	\$	0
2) Contributions (Employer and Employee)*		0
3) Benefit Payments		0
4) Transfers to the 3 <sup>rd</sup> or 4 <sup>th</sup> Level Pool		0
5) Investment Earnings Credited		<u>0</u>
6) Ending Balance 6/30/96 [(1)+(2)-(3)-(4)+(5)]	\$	0

\* In accordance with Generally Accepted Accounting Principles (GAAP), the CalPERS Fiscal Services Division's accounting records include accounts receivable to recognize income that is measurable and due. When CalPERS receives payroll information, it determines the amount receivable for employer and employee contributions. Thus, CalPERS accounts receivable reflect contributions due, even if not paid.

**Active Members in Valuation  
By Attained Age & Years of Service  
June 30, 1996**

Attained Age	--Years of Service at Valuation Date--						Total	
	0-4	5-9	10-14	15-19	20-29	30+	Count	Valuation Payroll
15-24	1	0	0	0	0	0	1	40,388
25-29	6	2	0	0	0	0	8	310,826
30-34	7	7	0	0	0	0	14	566,135
35-39	2	2	3	1	0	0	8	350,120
40-44	0	2	3	4	0	0	9	428,579
45-49	0	0	2	1	2	0	5	255,569
50-54	0	1	0	0	2	0	3	154,664
55-59	0	0	0	0	1	0	1	42,375
60-64	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0
<b>Total</b>	<b>16</b>	<b>14</b>	<b>8</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>49</b>	<b>\$2,148,655</b>

Counts of members included in the valuation are counts of the records processed by the valuation system. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

## **Appendix A**

### **STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS**

## **Actuarial Methods**

### **Funding Method**

The actuarial funding method used for this report is the Entry Age Normal Cost Method. Under this method, projected benefits are determined for all members and the associated liabilities are spread in a manner that produces level annual cost as a percent of pay in each year from the age of hire (entry age) to the assumed retirement age. The cost allocated to the current fiscal year is called the normal cost.

The actuarial accrued liability for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for members currently receiving benefits, for active members beyond the assumed retirement age, and for members entitled to deferred benefits, is equal to the present value of the benefits expected to be paid. No normal costs are applicable for these participants.

The excess of the total actuarial accrued liability over the value of plan assets is called the unfunded actuarial accrued liability. Funding requirements are determined by adding the normal cost and an amortization of the unfunded liability as a level percentage of projected annual payroll. The CalPERS Board has adopted new policies regarding the amortization of the unfunded liability/(excess assets). The first implementation of this new policy is done in this valuation. That first step is to combine the prior service unfunded liability and the current service unfunded liability into a single initial unfunded liability and to establish a single amortization period for this initial unfunded liability. Commencing with fiscal year 1998-99, the amortization period for most public agency plans is 2 years, 13 years, or 18 years (funding horizons of 2000, 2011, and 2016 respectively).

Prior to June 30, 1997, a portion of the assets in excess of the Entry Age Normal Accrued liability was available to be applied as a direct offset to required employer and employee contributions. By State statute, this is no longer possible. All assets in excess of Entry Age Normal liabilities, as projected to June 30, 1998, are now used to reduce the employer contribution rate.

### **Purchasing Power Protection Act (PPPA) Method**

PPPA benefits are cost-of-living adjustments intended to maintain the individual's current retirement benefit at 75% of the original benefit at retirement adjusted for inflation since retirement. The PPPA benefit is paid, if necessary, in addition to any other cost-of-living adjustment provided under the terms of the plan. The total annual outlay for PPPA benefits is limited by State statute to the amount of earnings, up to 1.1%, on accumulated member contributions. If this annual outlay is insufficient to provide the PPPA benefits in a given fiscal year, the 75% maintenance target would be proportionately reduced. Since the inception of the PPPA benefit program, 1.1% has proven more than sufficient to provide the 75% maintenance. Under the inflation assumption of 4.5% compounded annually, the 1.1% appears to remain sufficient over the next 20 years or more on a pooled basis, but not on a plan by plan basis. That is, some individual plans require more than the 1.1% return to fund that plan's PPPA benefits.

In August, 1995, the Board changed the PPPA administrative approach. This approach requires that each plan pay as much of its own way for PPPA as possible, up to the full 1.1% of the investment return on that plan's employee assets. In this way cross-subsidization is minimized. The actuarial valuation mimics this change in the PPPA administrative procedure and derives employer rates as the lesser of two separate actuarially computed rates:

- 1) The rate that results if a full 1.1% of the investment return on the plan's employee assets is used for that plan's PPPA payments; or
- 2) The rate that results if the plan pays the full 75% purchasing power for itself.



This model is an appropriate reflection of the current PPPA administrative procedures. Those plans for which PPPA costs are 1.1% or more are charged a rate that replaces the 1.1%. Those plans that require less than the 1.1% to maintain 75% purchasing power are not charged the full 1.1%. Instead, they are charged the rate necessary to maintain the 75%. It should be noted that nothing is charged in the rates for any cross-subsidization. The model assumes that cross subsidization for PPPA will remain so small that it can be ignored. To the extent this assumption does not materialize, losses in some plans will occur and rates will increase.

### **Internal Revenue Code Section 415**

The limitations on benefits imposed by Internal Revenue Code Section 415 were not taken into account in this valuation. The effect of these limitations has been deemed immaterial on the overall results of this valuation.

### **Asset Valuation Method**

In order to dampen the effect of short term market value fluctuations on employer contribution rates, the following asset smoothing technique is used. Each fiscal year's (July 1 through June 30) unrealized and realized gain or loss is spread across two to five years according to the following schedule.

Portion of the Gain/(Loss)	Years over which that portion of the Gain/Loss is spread
Less than 5% of market value	2 Years
Over 5% and less than 10% of market value	3 Years
Over 10% but less than 15% of market value	4 Years
Over 15% of market value	5 Years

As of a valuation date, the actuarial value of assets for the sum of all plans in the Public Employees' Retirement Fund (PERF) is set equal to the market value of assets less the sum of the portions of gains or losses deferred into future years by the method. The ratio of the total actuarial value of assets of the PERF to the total market value of assets of the PERF is then applied to the market value of each individual plan to determine its actuarial value.

## Actuarial Assumptions

### Economic Assumptions:

Investment Return	-	8.5% compounded annually net of investment return. This assumption is used for all plans.
Salary Growth	-	Annual increases that vary by duration of service. Sample rates are given below.

<u>Duration of Service</u>	<u>Annual Percent Increase</u>		
	<u>Public Agency Miscellaneous</u>	<u>Public Agency Safety</u>	
		<u>Entry under Age 40</u>	<u>Entry 40 &amp; Over</u>
1	14.95%	12.34%	5.02%
2	14.95	12.34	5.02
3	7.11	8.16	5.02
4	7.11	8.16	5.02
5	7.11	8.16	5.02
10	5.55	5.91	5.02
15	5.55	5.91	5.02
20	5.55	5.91	5.02
25	5.55	5.91	5.02
30	5.55	5.91	5.02
35	4.50	5.91	5.02
40	4.50	5.91	5.02

Overall Payroll Growth	-	4.5% compounded annually (used in projecting the payroll over which the unfunded liability is amortized). This assumption is used for all plans.
Inflation	-	4.5% compounded annually. This assumption is used for all plans.

**Public Agency Miscellaneous 2% @ 60**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.02654	0.03684	61	0.12426	0.08696
51	0.01228	0.02559	62	0.23818	0.18980
52	0.01834	0.02773	63	0.21037	0.17706
53	0.01619	0.03078	64	0.14311	0.12882
54	0.02251	0.03071	65	0.24399	0.23837
55	0.04813	0.05390	66	0.13820	0.14190
56	0.03957	0.04576	67	0.11208	0.14001
57	0.04788	0.04213	68	0.11736	0.10330
58	0.05500	0.06735	69	0.09036	0.12344
59	0.06811	0.06523	70	1.00000	1.00000
60	0.12807	0.09825			

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry</u> <u>Age</u>	<u>Termination with Refund (Male)</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.07141	0.15327	0.10537	0.09504	0.07720	0.06393
25	0.07018	0.14350	0.09987	0.08769	0.07244	0.04386
30	0.06896	0.13435	0.09465	0.08090	0.06797	0.03009
35	0.06777	0.12578	0.08971	0.07464	0.06377	0.02064
40	0.06660	0.11776	0.08502	0.06886	0.05984	0.01416
45	0.06544	0.11025	0.08058	0.06353	0.05615	0.00971
50	0.06431	0.10322	0.07637	0.05862	0.05268	0.00666
55	0.06320	0.09664	0.07238	0.05408	0.04943	0.00457
60	0.06211	0.09048	0.06860	0.04990	0.04638	0.00314

<u>Entry</u> <u>Age</u>	<u>Termination with Refund (Female)</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.08630	0.18606	0.15121	0.12665	0.11838	0.07966
25	0.08532	0.17473	0.13666	0.11372	0.09983	0.05601
30	0.08435	0.16410	0.12350	0.10211	0.08419	0.03939
35	0.08339	0.15411	0.11162	0.09169	0.07099	0.02770
40	0.08245	0.14473	0.10087	0.08233	0.05987	0.01948
45	0.08151	0.13592	0.09116	0.07392	0.05049	0.01370
50	0.08059	0.12765	0.08239	0.06638	0.04257	0.00963
55	0.07967	0.11988	0.07446	0.05960	0.03590	0.00677
60	0.07877	0.11258	0.06729	0.05352	0.03028	0.00476

Ordinary Death	-	Rates that vary by age. See sample rates in table below.
Ordinary Disability	-	Rates that vary by age. See sample rates in table below.
Termination with Vested Deferred Benefits	-	Rates that vary by age. See sample rates in table below.

Attained <u>Age</u>	Male			Female		
	Ordinary	Ordinary	Termination with Vested	Ordinary	Ordinary	Termination with Vested
	<u>Death</u>	<u>Disability</u>	<u>Benefits</u>	<u>Death</u>	<u>Disability</u>	<u>Benefits</u>
20	0.00027	0.00048	0.02023	0.00007	0.00032	0.03299
25	0.00039	0.00070	0.01818	0.00012	0.00047	0.02910
30	0.00055	0.00102	0.01633	0.00018	0.00069	0.02567
35	0.00078	0.00148	0.01467	0.00028	0.00102	0.02264
40	0.00110	0.00215	0.01318	0.00044	0.00150	0.01997
45	0.00155	0.00313	0.01184	0.00069	0.00220	0.01762
50	0.00219	0.00456	0.00000	0.00108	0.00322	0.00000
55	0.00310	0.00663	0.00000	0.00169	0.00473	0.00000
60	0.00438	0.00000	0.00000	0.00264	0.00000	0.00000

**Public Agency Miscellaneous 2% @ 55**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.03466	0.04811			
51	0.01617	0.03369	61	0.13474	0.09430
52	0.02439	0.03688	62	0.24803	0.19765
53	0.02177	0.04137	63	0.21037	0.17706
54	0.03053	0.04165	64	0.14311	0.12882
55	0.06593	0.07384	65	0.24399	0.23837
56	0.05232	0.06050	66	0.13820	0.14190
57	0.06106	0.05372	67	0.11208	0.14001
58	0.06745	0.08260	68	0.11736	0.10330
59	0.08032	0.07693	69	0.09036	0.12344
60	0.14485	0.11112	70	1.00000	1.00000

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

Entry <u>Age</u>	Termination with Refund (Male)					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.07039	0.14989	0.10218	0.09133	0.07347	0.06020
25	0.06817	0.13716	0.09381	0.08084	0.06543	0.03874
30	0.06601	0.12546	0.08605	0.07142	0.05810	0.02482
35	0.06390	0.11468	0.07883	0.06298	0.05143	0.01582
40	0.06184	0.10477	0.07214	0.05541	0.04536	0.01003
45	0.05983	0.09566	0.06593	0.04864	0.03985	0.00631
50	0.05788	0.08774	0.06110	0.04396	0.03688	0.00433
55	0.05688	0.08215	0.05791	0.04056	0.03460	0.00297
60	0.05589	0.07691	0.05488	0.03742	0.03247	0.00204

Entry <u>Age</u>	Termination with Refund (Female)					
	Years of Service					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.08507	0.18195	0.14663	0.12170	0.11265	0.07501
25	0.08288	0.16702	0.12837	0.10484	0.09017	0.04948
30	0.08074	0.15324	0.11228	0.09015	0.07197	0.03250
35	0.07863	0.14051	0.09809	0.07736	0.05725	0.02124
40	0.07656	0.12877	0.08559	0.06625	0.04538	0.01380
45	0.07453	0.11793	0.07459	0.05660	0.03583	0.00890
50	0.07253	0.10850	0.06591	0.04978	0.02980	0.00626
55	0.07170	0.10189	0.05957	0.04470	0.02513	0.00440
60	0.07089	0.09569	0.05383	0.04014	0.02119	0.00310

Ordinary Death	-	Rates that vary by age. See sample rates in table below.
Ordinary Disability	-	Rates that vary by age. See sample rates in table below.
Termination with Vested Deferred Benefits	-	Rates that vary by age. See sample rates in table below.

Attained Age	Male			Female		
	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits	Ordinary Death	Ordinary Disability	Termination with Vested Deferred Benefits
20	0.00027	0.00048	0.02023	0.00007	0.00032	0.03299
25	0.00039	0.00070	0.01818	0.00012	0.00047	0.02910
30	0.00055	0.00102	0.01633	0.00018	0.00069	0.02567
35	0.00078	0.00148	0.01467	0.00028	0.00102	0.02264
40	0.00110	0.00215	0.01318	0.00044	0.00150	0.01997
45	0.00155	0.00313	0.01184	0.00069	0.00220	0.01762
50	0.00219	0.00456	0.00000	0.00108	0.00322	0.00000
55	0.00310	0.00663	0.00000	0.00169	0.00473	0.00000
60	0.00438	0.00000	0.00000	0.00264	0.00000	0.00000

**Public Agency Fire 2% @ 50**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.03673	56	0.11305
51	0.03475	57	0.09843
52	0.06045	58	0.11843
53	0.11071	59	0.10456
54	0.15878	60	1.00000
55	0.22109		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry Age</u>	<u>Termination with Refund</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.03915	0.03743	0.03579	0.03423	0.03273	0.01109
25	0.03129	0.02992	0.02861	0.02736	0.02616	0.00663
30	0.02501	0.02392	0.02287	0.02187	0.02091	0.00397
35	0.02000	0.01912	0.01828	0.01748	0.01672	0.00238
40	0.01598	0.01528	0.01461	0.01397	0.01336	0.00142
45	0.01278	0.01222	0.01168	0.01117	0.01068	0.00085
50	0.01021	0.00977	0.00934	0.00893	0.00854	0.00051
55	0.00816	0.00781	0.00746	0.00714	0.00683	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability, Industrial Death, Termination with Vested Deferred Benefits - Rates that vary by age. See sample rates in table below.

<u>Attained Age</u>	<u>Termination with Vested</u>				
	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>	<u>Deferred Benefits</u>
20	0.00017	0.00009	0.00040	0.00011	0.00669
25	0.00020	0.00015	0.00073	0.00014	0.00590
30	0.00023	0.00024	0.00133	0.00018	0.00521
35	0.00028	0.00039	0.00242	0.00023	0.00460
40	0.00033	0.00062	0.00441	0.00029	0.00406
45	0.00039	0.00099	0.00802	0.00038	0.00358
50	0.00046	0.00158	0.01460	0.00048	0.00000
55	0.00054	0.00000	0.02658	0.00062	0.00000

**Public Agency Fire other than 2% @ 50**

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.01588	56	0.11079
51	0.00000	57	0.00000
52	0.03442	58	0.09499
53	0.01990	59	0.04409
54	0.04132	60	1.00000
55	0.07513		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry Age</u>	<u>Termination with Refund</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.04837	0.04717	0.04600	0.04486	0.04374	0.01190
25	0.04266	0.04160	0.04057	0.03956	0.03858	0.01029
30	0.03762	0.03668	0.03577	0.03488	0.03402	0.00891
35	0.03317	0.03235	0.03155	0.03076	0.03000	0.00771
40	0.02925	0.02853	0.02782	0.02713	0.02645	0.00667
45	0.02580	0.02516	0.02453	0.02392	0.02333	0.00577
50	0.02275	0.02218	0.02163	0.02110	0.02057	0.00500
55	0.02006	0.01956	0.01908	0.01860	0.01814	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability, Industrial Death, Termination with Vested Deferred Benefits - Rates that vary by age. See sample rates in table below.

<u>Attained Age</u>						<u>Termination with Vested</u>
	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>	<u>Deferred Benefits</u>	
20	0.00017	0.00009	0.00013	0.00011	0.01076	
25	0.00020	0.00015	0.00027	0.00014	0.01000	
30	0.00023	0.00024	0.00057	0.00018	0.00930	
35	0.00028	0.00039	0.00120	0.00023	0.00864	
40	0.00033	0.00062	0.00251	0.00029	0.00803	
45	0.00039	0.00099	0.00527	0.00038	0.00746	
50	0.00046	0.00158	0.01105	0.00048	0.00000	
55	0.00054	0.00000	0.02315	0.00062	0.00000	



**Public Agency Police 2% @ 50\***

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.05857	56	0.11855
51	0.04340	57	0.07146
52	0.04165	58	0.08968
53	0.15350	59	0.08743
54	0.17021	60	1.00000
55	0.18571		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry Age</u>	<u>Termination with Refund</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.04373	0.08438	0.04756	0.04644	0.04650	0.03226
25	0.04758	0.08654	0.04711	0.04415	0.04182	0.01934
30	0.05177	0.08876	0.04666	0.04197	0.03761	0.01159
35	0.05633	0.09103	0.04622	0.03990	0.03382	0.00695
40	0.06128	0.09337	0.04579	0.03794	0.03041	0.00417
45	0.06668	0.09576	0.04535	0.03607	0.02735	0.00250
50	0.07255	0.09821	0.04492	0.03429	0.02459	0.00150
55	0.07893	0.10072	0.04450	0.03260	0.02211	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability, Industrial Death, Termination with Vested Deferred Benefits - Rates that vary by age. See sample rates in table below.

<u>Attained Age</u>	<u>Ordinary Death</u>	<u>Ordinary Disability</u>	<u>Industrial Disability</u>	<u>Industrial Death</u>	<u>Termination with Vested Deferred Benefits</u>
20	0.00017	0.00018	0.00250	0.00011	0.01309
25	0.00020	0.00024	0.00347	0.00014	0.01155
30	0.00023	0.00033	0.00482	0.00018	0.01018
35	0.00028	0.00044	0.00669	0.00023	0.00898
40	0.00033	0.00060	0.00928	0.00029	0.00792
45	0.00039	0.00082	0.01289	0.00038	0.00699
50	0.00046	0.00112	0.01789	0.00048	0.00000
55	0.00054	0.00000	0.02484	0.00062	0.00000

\* These rates also apply to School Police. The only difference is the industrial disability rate. The School Police use a percentage of the rate displayed above, based on the actuary's best estimate.

**Public Agency Police other than 2% @ 50\***

Demographic Assumptions:

Service Retirement - Rates that vary by age. See sample rates in table below.

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
50	0.02552	56	0.06921
51	0.00000	57	0.05113
52	0.01637	58	0.07241
53	0.02717	59	0.07043
54	0.00949	60	1.00000
55	0.16674		

Termination with Refund - Rates that vary by age and service. See sample rates in table below.

<u>Entry</u> <u>Age</u>	<u>Termination with Refund</u>					
	<u>Years of Service</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5 or more</u>
20	0.05709	0.05768	0.05828	0.05888	0.05949	0.03497
25	0.06011	0.06073	0.06135	0.06199	0.06263	0.02683
30	0.06328	0.06393	0.06459	0.06526	0.06593	0.02058
35	0.06662	0.06730	0.06800	0.06870	0.06941	0.01578
40	0.07013	0.07085	0.07159	0.07233	0.07307	0.01211
45	0.07383	0.07459	0.07536	0.07614	0.07693	0.00929
50	0.07772	0.07853	0.07934	0.08016	0.08099	0.00712
55	0.08183	0.08267	0.08353	0.08439	0.08526	0.00000

Ordinary Death, Ordinary Disability, Industrial Disability, Industrial Death, Termination with Vested Deferred Benefits - Rates that vary by age. See sample rates in table below.

<u>Attained</u> <u>Age</u>	<u>Ordinary</u> <u>Death</u>	<u>Ordinary</u> <u>Disability</u>	<u>Industrial</u> <u>Disability</u>	<u>Industrial</u> <u>Death</u>	<u>Termination</u> <u>with Vested</u> <u>Deferred</u> <u>Benefits</u>
20	0.00017	0.00069	0.00260	0.00011	0.01516
25	0.00020	0.00118	0.00355	0.00014	0.01424
30	0.00023	0.00167	0.00483	0.00018	0.01338
35	0.00028	0.00216	0.00658	0.00023	0.01257
40	0.00033	0.00265	0.00896	0.00029	0.01180
45	0.00039	0.00313	0.01221	0.00038	0.01109
50	0.00046	0.00362	0.01663	0.00048	0.00000
55	0.00054	0.00000	0.02266	0.00062	0.00000

\* These rates also apply to School Police. The only difference is the industrial disability rate. The School Police use a percentage of the rate displayed above, based on the actuary's best estimate.

## **Appendix B**

### **SUMMARY OF PRINCIPAL PLAN PROVISIONS**

**SUMMARY OF BENEFITS: COVERAGE GROUP 75001**

The following is a summary of the major plan provisions used in calculating the liabilities of the plan. Many of the statements in this summary are general in nature, and are intended to provide an easily understood summary of the complex Public Employees' Retirement Law. The law itself governs in all situations.

## RETIREMENT PROGRAM

### Service Retirement

#### Eligibility

A CalPERS member becomes eligible for Service Retirement upon attainment of age 50 with at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

#### Benefit

The Service Retirement benefit calculated for service earned by this group of employees is a monthly allowance equal to the product of the *benefit factor*, *years of service*, and *final compensation*, where

- The *benefit factor* for this group of employees comes from the **2% at 50** benefit factor table. The factor depends on the member's age at retirement. Listed below are the factors for retirement at whole year ages:

<b>Retirement Age</b>	<b>2% at 50 Factor</b>
50	2.0000%
51	2.1400%
52	2.2800%
53	2.4200%
54	2.5600%
55 & Up	2.7000%

- The *years of service* is the amount credited by CalPERS to a member while he or she is employed in this group (or for other periods that are recognized under the employer's contract with CalPERS). For a member who has earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance. Any unused sick leave accumulated at the time of retirement will be converted to credited service at the rate of 0.004 years of service for each day of sick leave.
- The *final compensation* is the monthly average of the member's highest 12 consecutive months' full-time equivalent monthly pay (no matter which CalPERS employer paid this compensation). The employees in this group are not covered by Social Security. The final compensation is not offset by a dollar amount.
- The Service Retirement benefit is capped at 75% of final compensation.

### Vested Deferred Retirement

**Eligibility for Deferred Status**

A CalPERS member becomes eligible for a deferred vested retirement benefit when he or she leaves employment, keeps his or her contribution account balance on deposit with CalPERS, **and** has earned at least 5 years of credited service (total service across all CalPERS employers, and with certain other Retirement Systems with which CalPERS has reciprocity agreements).

**Eligibility to Start Receiving Benefits**

The CalPERS member becomes eligible to receive the deferred retirement benefit upon satisfying the eligibility requirements for Deferred Status and upon attainment of age 50.

**Benefit**

The vested deferred retirement benefit is the same as the Service Retirement benefit, where the benefit factor is based on the member's age at allowance commencement. For members who have earned service with multiple CalPERS employers, the benefit from each employer is calculated separately according to each employer's contract, and then added together for the total allowance.

**Non-Industrial (Non-Job Related) Disability Retirement**

**Eligibility**

A CalPERS member is eligible for Non-Industrial Disability Retirement if he or she becomes *disabled* and has at least 5 years of credited service (total service across all PERS employers, and with certain other Retirement Systems with which PERS has reciprocity agreements). There is no special age requirement. *Disabled* means the member is unable to perform his or her job because of an illness or injury which is expected to be permanent or to last indefinitely. The illness or injury does not have to be job related. A CalPERS member must be actively working with any CalPERS employer at the time of disability in order to be eligible for this benefit.

**Benefit**

The Non-Industrial Disability Retirement benefit is a monthly allowance equal to 1.8% of final compensation, multiplied by *service*, which is determined as follows:

- *service* is CalPERS credited service, for members with less than 10 years of service or greater than 18.518 years of service; or
- *service* is CalPERS credited service plus the additional number of years that the member would have worked until age 60, for members with at least 10 years but not more than 18.518 years of service. The maximum benefit in this case is 33 1/3% of Final Compensation.

Members who are eligible for a larger service retirement benefit may choose to receive that benefit in lieu of a disability benefit. Members eligible to retire, and who have attained the normal retirement age determined by their service retirement benefit formula, will receive the same dollar amount for disability retirement as that payable for service retirement. For members who have earned service with multiple CalPERS employers, the benefit attributed to each employer is the total disability allowance multiplied by the ratio of service with a particular employer to the total CalPERS service.

**Industrial (Job-Related) Disability Retirement**

**Eligibility**

An employee is eligible for Industrial Disability Retirement if he or she becomes *disabled* while working, where *disabled* means the member is unable to perform the duties of the job because of a work-related illness or injury which is expected to be permanent or to last indefinitely. A CalPERS member who has left active employment within this group is not eligible for this benefit, except to the extent described in the next paragraph.

**Benefit**

The Industrial Disability Retirement benefit is a monthly allowance equal to 50% of final compensation. However, if a member is eligible for Service Retirement and if the Service Retirement benefit is more than the Industrial Disability Retirement benefit, the member may choose to receive the larger benefit. For a member who entered into CalPERS after 1/1/80, the Industrial Disability benefit is limited to the amount he or she would have received for service retirement, if credited service were projected to age 55. For a CalPERS member not actively employed in this group who became disabled while employed by some other CalPERS employer, the benefit is a return of the accumulated member contributions with respect to employment in this group.

**Post-Retirement Death Benefit**

**Lump Sum Payment**

Upon the death of a retiree, a one-time lump sum payment of \$500 will be made to the retiree's designated survivor(s), or to the retiree's estate.

**Form of Payment for Retirement Allowance**

Generally, the retirement allowance is paid to the retiree in the form of an annuity for as long as he or she is alive. The retiree may choose to provide for a portion of his or her allowance to be paid to any designated beneficiary after the retiree's death. CalPERS provides for a variety of such benefit options, which the retiree pays for by taking a reduction in his or her retirement allowance. The larger the amount to be provided to the beneficiary is, and the younger the beneficiary is, the greater the reduction to the retiree's allowance.

**Pre-Retirement Death Benefits**

**Basic Death Benefit**

**Eligibility**

An employee's beneficiary (or estate) may receive the Basic Death benefit if the member dies while actively employed. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. A member's survivor who is eligible for any other pre-retirement death benefit described below may choose to receive that death benefit instead of this Basic Death benefit.

**Benefit**

The Basic Death Benefit is a lump sum in the amount of the member's accumulated contributions, where interest is currently credited at 8.5% per year, plus a lump sum in the amount of one month's salary for each completed year of current service, up to a maximum of six months' salary. For purposes of this benefit, one month's salary is defined as the member's average monthly full-time rate of compensation during the 12 months preceding death.

**1957 Survivor Benefit**

**Eligibility**

An employee's *eligible survivor(s)* may receive the 1957 Survivor benefit if the member dies while actively employed, has attained at least age 50, and has at least 5 years of credited service (total service across all CalPERS employers and with certain other Retirement Systems with which CalPERS has reciprocity agreements). A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married at least one year before death or, if there is no eligible spouse, to the member's unmarried children under age 18. A member's survivor may choose this benefit in lieu of the Basic Death benefit or the Special Death benefit.

### **Benefit**

The 1957 Survivor benefit is a monthly allowance equal to one-half of the unmodified Service Retirement benefit that the member would have been entitled to receive if the member had retired on the date of his or her death. If the benefit is payable to the spouse, the benefit is discontinued upon the death or remarriage of the spouse. The spouse may elect to receive a reduced allowance that would not end upon remarriage. If the benefit is payable to a dependent child, the benefit will be discontinued upon death or attainment of age 18, unless the child is disabled. There is a guarantee that the total amount paid will at least equal the Basic Death benefit.

## **Special Death Benefit**

### **Eligibility**

An employee's *eligible survivor(s)* may receive the Special Death benefit if the member dies while actively employed and the death is job-related. A CalPERS member who is no longer actively employed with **any** CalPERS employer is not eligible for this benefit. An *eligible survivor* means the surviving spouse to whom the member was married prior to the onset of the injury or illness that resulted in death. If there is no eligible spouse, an eligible survivor means the member's unmarried children under age 22. An eligible survivor who chooses to receive this benefit will not receive any other death benefit.

### **Benefit**

The Special Death benefit is a monthly allowance equal to 50% of final compensation. The allowance is payable to the surviving spouse until death or remarriage, at which time the allowance is continued to any unmarried children under age 22. The spouse may elect to receive a reduced allowance that would not end upon remarriage. There is a guarantee that the total amount paid will at least equal the Basic Death Benefit.

If the member's death is the result of an accident or injury caused by external violence or physical force incurred in the performance of the member's duty, and there are *eligible* surviving children (*eligible* means unmarried children under age 22) in addition to an eligible spouse, then an **additional monthly allowance** is paid equal to the following:

- if 1 eligible child: 12.5% of final compensation
- if 2 eligible children: 20.0% of final compensation
- if 3 or more eligible children: 25.0% of final compensation

## **Cost-of-Living Adjustments**

Beginning the second calendar year after the year of retirement, retirement and survivor allowances will be annually adjusted on a compound basis by 2%. However, the cumulative adjustment may not be greater than the cumulative change in the Consumer Price Index since the date of retirement.

### **Purchasing Power Protection Allowance (PPPA)**

Retirement and survivor allowances are protected against inflation by PPPA. PPPA benefits are cost-of-living adjustments that are intended to maintain an individual's allowance at 75% of the initial allowance at retirement adjusted for inflation since retirement. The PPPA benefit will be coordinated with other cost-of-living adjustments provided under the plan. The total annual outlay for PPPA is limited to 1.1% of accumulated member contributions. If this amount of member contributions were insufficient to provide for PPPA payments, the 75% target would be proportionately reduced.

### **Employee Contributions**

Each employee contributes toward his or her retirement based upon the following schedule. The employer may choose to "pick-up" these contributions for the employees.

The percent contributed below the monthly compensation breakpoint is 0%.

The monthly compensation breakpoint is \$0.

The percent contributed above the monthly compensation breakpoint is 9%.

### **Refund of Employee Contributions**

If the member's service with the employer ends, and if the member does not satisfy the eligibility conditions for any of the retirement benefits above, the member may elect to receive a refund of his or her employee contributions, which are credited annually with 6% interest.